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FOUNDED BY WILLIAM HUNTING, F.R.C.V.S., 1888.

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NATIONAL VETERINARY MEDICAL ASSOCIATION

PRESIDENT'S NEW YEAR MESSAGE TO MEMBERS

To All Members of the National Veterinary Medical Association

FORTUNATE indeed is the President of the N.V.M.A. who can wish its members a Happy and Prosperous New Year with the reasonable prospect of his wishes and hopes being fulfilled. Never before in the history of the Association has a New Year dawned with less promise for the Veterinary Profession or indeed for the world in general. Certainly in no previous conflict have we, as a profession, been less able to see clearly what our duty is or where it lies.

The profession, for the first time in its history, appears on the Government schedule of reserved occupations and owing to the economic importance of the country's livestock we now take our legitimate place as an indispensable branch of Home Defence. It is true that the future prospects and requirements of our Army Veterinary Service are shrouded in mystery, for cavalry and yeomanry are no longer mounted units, artillery has lost its horses, and army horse transport is reduced to the absolute minimum.

In civil practice evacuation and mass hysteria in the first few days of war crippled many town practitioners, and the threat of serious food shortage for farm stock makes the immediate future of the country veterinary surgeon precarious. On grounds of economy, too, the Minister of Agriculture has been constrained to curtail or abandon schemes for control or eradication of disease.

The Loveday Report which, even if only some of its provisions could have been implemented would have improved the lot of every member of the profession, has, alas, been shelved indefinitely.

One could continue to cite disturbing factors, but enough has been said to illustrate the difficulty under which I labour to send a cheerful message to you at the beginning of a New Year.

To our already disorganised existence comes the call for further sacrifice—an appeal for help from the National A.R.P. for Animals Committee to every member to give his or her professional services without remuneration. We have agreed, some willingly and some reluctantly, because here was a job for which we are trained, and the welfare of animals was at stake. For this National Service upon which we are engaged we can but hope to receive our " out-of-pocket " expenses. Furthermore we have been invited to assist in organising the registration branch of that committee in its endeavours to raise funds by an ingenious system of registration so as to ensure the equipping and maintenance of the technical services. Our sacrifice is great and one is entitled to ask, what will be the outcome ? Every cloud has its silver lining, and the response which the profession has given to this call to National Service by N.A.R.P.A.C. is one of the highlights which not only illumines the present " black-out " existence but enhances the prestige of our honourable profession.

By the creation of the National A.R.P. for Animals Committee, the animal welfare societies have combined in a manner which a few months ago many would have thought impossible, but to-day they sit around the conference table in collaboration with our colleagues framing measures to guard and protect our animal population in these critical times. Is it too much to foreshadow the creation of a great Animal Welfare Federation, with the Veterinary Profession as its keystone ? I believe not. We have in the past had good cause to view with suspicion the activities of certain animal welfare societies which have deprived the animals of skilled veterinary treatment and caused financial loss to the veterinarian. A golden opportunity now presents itself through this National movement, to lay the foundation stone of a building whose superstructure shall be a solid edifice representative of Animal Welfare. Now is the chance to start *de novo*. Let us therefore plan aright with the knowledge that there is work for all in a common cause—a task that can be much better done by co-operation than by inco-ordinated, divided effort. We shall make mistakes—that is inevitable ; but with good will, courtesy, patience, tolerance, mutual respect and appreciation of effort, we shall succeed. It behoves us to set a high example to those who, less fortunate than we, have not had the benefit of five years' intensive training and who, in consequence, have in the past hesitated or failed to enlist our services.

Many of you will have seen the resolution which was recently passed at a plenary session of N.A.R.P.A.C. —it is translated for all to read :—

" That no offer of assistance of any description for the National A.R.P. Animals Committee be accepted from any person engaged in the treatment of animals for private pecuniary gain other than members of the Royal College of Veterinary Surgeons."

The possible repercussions of this resolution upon post-war problems invite your careful consideration. Within the framework of a somewhat similar organisation to that of N.A.R.P.A.C. I would like to see erected all over the country well-built, well-equipped, animal hospitals, each in the charge of a resident veterinary surgeon, or run, perhaps, on the lines of a cottage hospital, where the animals of the poor could receive proper skill and attention. In this connection I would just like to emphasise the point of view that there are two classes of " poor "—those who cannot afford even an initial veterinary fee and those who, though well able to afford that, are still quite unable to afford a fee commensurate with a case requiring expensive or prolonged treatment. Both these classes are at present a drain upon the charitable veterinary surgeon, and would be catered for by these hospitals. I do not consider that this is either the time or place to enlarge upon this prospect, but I am satisfied that very material benefit would accrue to the Veterinary Profession, the animal welfare societies and the animals whose interests are our first consideration.

We hope that, in connection with the above as on other issues, this Association, during the coming year, will find many opportunities of working in collaboration with the Council of the Royal College of Veterinary Surgeons in promoting the common interests of the profession.

With the appointment of Professor Dalling to the Poultry Industry Advisory Committee, we hope and believe that the Association has achieved acceptance of the principle that a veterinary surgeon should be a member of any departmental committee concerned with livestock.

The Association is taking active measures to ensure that the importance of the veterinary surgeon in the Scheme of the Ministry of Food for the Control of Meat and Livestock is not overlooked. A comprehensive memorandum has been drawn up and we are hopeful that ere long we may have good news to report in this connection.

We have been disappointed to receive a communication from the Colonial Secretary stating that he is unable at the present time to implement his promise to appoint a veterinary adviser to the Colonial Office, but we are still hopeful that the last word on this matter has not been said, for already recent events in Northern Rhodesia show the necessity of inter-colonial co-operation under such an adviser.

The need for professional unity was never greater than it is to-day, but the effort of every single member is required to make the Association as strong as it should be, and I appeal to every member to do his or her utmost.

Members will appreciate the great difficulties under which both the officers of the Association and the staff at 86, Gordon Square, are working at the present time ; no tribute that I can pay the latter would be too high for their cheerful and unremitting labours, during long hours, which they are giving both to the work of our Association and to that of N.A.R.P.A.C.

Let me conclude by wishing you in all sincerity every success in 1940, and may you find comfort and encouragement in these lines, which appear to be singularly appropriate in these days :—

" *Grant us so rich a faith,*
So high a courage,
That we may not fail."

A. W. Steele Bodger.

President.

Emergency committees have been appointed by the Welsh Pony and Cob Society and the Welsh Pig Society to conduct the affairs of the respective societies until the termination of the war. Mr. T. E. Jenkins is the President of the Pony and Cob Society and Mr. T. Jeffreys is President of the Welsh Pig Society.

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The Royal Dublin Society's spring show is to be carried on as usual in 1940. This was decided upon at a recent meeting of the Committee of Agriculture, when Mr. Henry Kennedy and Mr. H. J. Toler-Aylward were unanimously elected Chairman and Vice-Chairman respectively.

UNDULANT FEVER INSURANCE FOR FARMERS

The National Farmers' Union Mutual Insurance Society (Ltd.) has drawn up a special policy to cover the risk of liability incurred by milk producers through any of their customers contracting undulant fever as the result of drinking milk produced on their farm.

It will be recalled that in a recent case before the Court of Appeal a milk producer was found liable for damages to the plaintiff who satisfied the Court that he had contracted undulant fever through drinking milk supplied by the producer. The damages awarded amounted to £195 19s 2d, in addition to which the defendant was liable for the costs. It is to relieve farmers of this very serious responsibility that the new policy issued by the Insurance Society is designed.

THE TREATMENT OF BR. ABORTUS INFECTION IN GUINEA-PIGS WITH M & B 693

F. W. PRIESTLEY
Research Officer to the Agricultural Research Council, South Eastern Agricultural College, Wye, Kent

Various workers have reported on the treatment of *Br. abortus* infection in guinea-pigs with sulphanilamide (see, Chinn, 1938; Montgomerie, 1938; Wilson and Maier, 1939), and in view of the moderately successful results it seemed desirable that M & B 693 [2(*p*-amino benzene sulphonamido) pyridine] should be similarly examined especially as this drug is claimed to be about four times less toxic than sulphanilamide (Wein, 1938).

Preliminary experiments showed that guinea-pigs could withstand a dose of 1 mgm. M & B 693 per gramme body weight daily for ten days without any obvious loss of condition. A dose of 5 mgm. per gramme body weight was definitely harmful, guinea-pigs losing weight and general condition within five days' time.

Experiment 1

For the first experiment on treatment it was decided to give a dose corresponding to approximately 2 mgm. per gramme body weight; after ten days' treatment, however, this dose was reduced to 1 mgm. per gramme because, as will be seen, the animals were rapidly losing weight.

Fifty guinea-pigs were infected with a virulent strain of *Br. abortus* (544) by placing on the conjunctiva one drop of a suspension of a two-day growth standardised by opacity to tube three of the Brown Scale. Fourteen days later treatment was commenced on 25 of these animals, the other 25 being left as controls.

At the commencement of treatment, as may be seen from Table I, the animals to be treated had an average weight of 436 grammes, whereas the average weight of the controls was 433 grammes, *i.e.*, both groups were substantially the same. Incidentally it may be stated that each group contained the same number of males and females.

For the first ten days each treated animal received orally through a piece of rubber tubing attached to an ordinary Record syringe 2·0 c.c. of dilute orange juice containing 800 mgm. M & B 693. At the end of that time the average weight of the 25 treated animals had dropped to 419 grammes, whereas the 25 controls had increased to an average of 467 grammes. In addition, the treated animals were ruffled in appearance and were quite obviously deteriorating under the treatment.

On the 11th day, *i.e.*, after ten daily doses had been given to the treated animals, six treated and six control animals were killed and examined, spleen cultures being made in duplicate on to liver agar. The results, shown in Table II, indicated that M & B 693 had had a marked therapeutic action; all the control animals were heavily infected, whereas three of the treated animals were culturally sterile, one showed only one colony of *Br. abortus* on two large slopes of agar, and the other two showed very small numbers of colonies.

From the 11th to the 20th day the remaining 19 treated animals received only 1·0 c.c. of the M & B 693 mixture, *i.e.*, 400 mgm. per day. During this period two of the treated animals died, one after receiving 13 doses and one after receiving 19 doses; both these animals were culturally negative for *Br. abortus*; the former animal showed ulceration of the small intestine, while the latter was apparently normal except that the mesenteric glands were enlarged.

By the 20th day the average weight of the 17 surviving treated animals had dropped to 395 grammes while the average weight of the 19 surviving controls had increased to 488 grammes.

Treatment ceased entirely after 20 doses had been administered.

The day after the cessation of treatment a further six treated and six control animals were killed and examined. Again all the controls were heavily infected, whereas three of the treated animals showed no sign of *Br. abortus* and the other three showed only an odd colony or so. Actually this result was rather disappointing in that it was expected that all six treated animals would be sterile.

Thereafter the animals were weighed every five days until the termination of the experiment. The results are shown in Table I and Fig. 1 from which it may be noted that as soon as treatment ceased the treated animals began to put on weight again.

Two more treated animals died in the next period of ten days. One of these showed ulceration of the small intestine and was culturally negative for *Br. abortus*; the other showed necrosis of the liver and fluid in the peritoneum and was culturally positive for *Br. abortus*.

On the 30th day, *i.e.*, ten days after the last dose of M & B 693 had been given, four treated and four control animals were killed and examined as above. The controls were all heavily infected. All the treated animals were also infected but again the numbers of colonies obtained were very much fewer than in the controls.

A further treated animal was found dead on the 31st day. This animal had apparently died of pneumococcus infection. Spleen cultures were positive for *Br. abortus*.

On the 41st day, *i.e.*, 21 days after the last dose of M & B 693 had been given, all surviving animals were killed and examined. There were four treated animals and nine controls. Again, it will be seen from Table II, there was a very considerable difference between the two groups. All the control animals were heavily infected whereas one of the treated was apparently entirely free of infection and the other three were only lightly infected. Actually the naked-eye differences at this stage were more pronounced than at any previous time; the spleens of the treated animals were all quite normal in size and appearance, whereas the spleens of the control animals were enormously enlarged. The blood-serum agglutinin titres were also very much lower in the treated than in the control animals.

Experiment 2

It was realised that if the drug was to have any wider application it would have to be successful in a relatively short time, partly owing to practical considerations and partly owing to its cost. The following experiment was therefore designed to see if a short and intensive course of treatment would be successful in ridding the body of *Br. abortus*.

Fifteen male guinea-pigs were infected by the eye route as in the first experiment and left for three weeks. They were then divided into two groups, one of ten animals and one of five, so that the average weights were as near equal as possible; actually the weights were 519 grammes and 533 grammes respectively.

The group of ten animals was treated *per os* every

TABLE I

SHOWING THE AVERAGE WEIGHTS AND THEIR STANDARD ERRORS OF TREATED AND UNTREATED ANIMALS AT INTERVALS AFTER THE COMMENCEMENT OF TREATMENT

	Days after the commencement of treatment.						
	0	10	20	25	30	35	40
Treated ...	436±12·3	419±12·0	395±11·8	423±15·2	454±17·8	476±25·1	533±18·31
Untreated ...	433±14·5	467±14·5	488±12·1	518±13·7	546±19·7	553±14·2	570±16·90

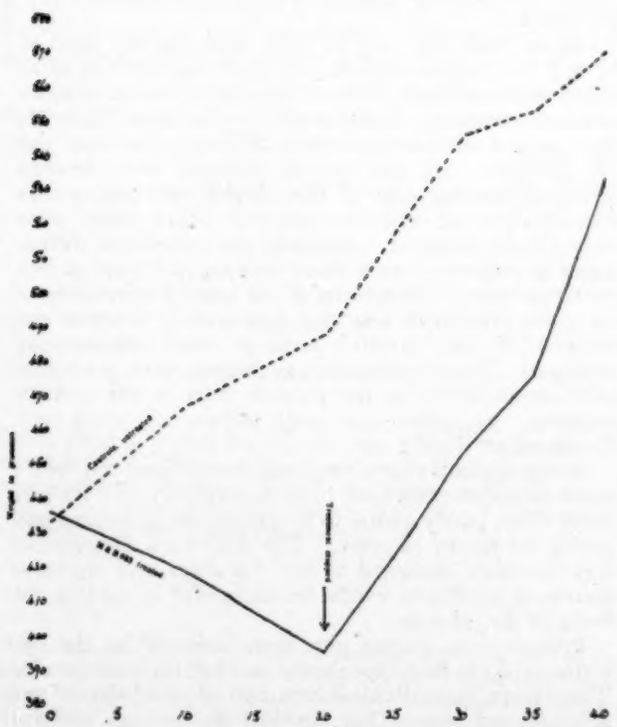
TABLE II

SHOWING THE NUMBERS OF COLONIES OF *Br. abortus* OBTAINED FROM SPLEEN CULTURES AT INTERVALS AFTER THE COMMENCEMENT OF TREATMENT

After 10 days.				After 20 days				After 30 days (10 days after cessation of treatment).				After 41 days (21 days after cessation of treatment).			
Treated.		Untreated.*		Treated.		Untreated.		Treated.		Untreated.		Treated.		Untreated.	
24	7	1,000	1,000	0	0	1,000	1,000	40	9	400	400	36	17	1,000	1,000
75	50	1,000	1,000	1	2	1,000	1,000	9	2	200	200	5	10	400	300
0	1	1,000	1,000	0	0	1,000	1,000	100	50	1,000	1,000	0	0	1,000	400
0	0	1,000	1,000	0	0	1,000	1,000	13	3	1,000	1,000	19	13	400	400
0	0	1,000	1,000	0	3	1,000	1,000							1,000	400
0	0	1,000	1,000	2	1	1,000	1,000							1,000	1,000
														1,000	1,000
														1,000	400
														1,000	400

* Figs. for 100 or over are approximations only.

Fig. 1.—Showing the average weights of treated and untreated animals at various intervals after the commencement of treatment.



Days after commencement of treatment.

TABLE III

SHOWING THE NUMBERS OF COLONIES OBTAINED FROM SPLEEN CULTURES OF TREATED AND CONTROL ANIMALS

After 5 days' treatment.		23 days after cessation of treatment			
Treated.		Treated.		Controls.	
100	100	100	100	1,000	400
100	100	1,000	1,000	1,000	400
100	100	1,000	400	1,000	400
800	100	1,000	1,000	1,000	1,000
		1,000	400	1,000	1,000

six hours for five days. The dose was given in dilute orange juice as before and consisted of 250 mgm., *i.e.*, 1,000 mgm. per day.

The animals were weighed periodically and the results were essentially similar to those of the previous experiment, *i.e.*, the controls steadily gained in weight, whereas the treated lost weight during treatment but immediately began putting on weight again as soon as treatment ceased.

One of the treated animals died after receiving eleven doses of 250 mgm. The small intestine was congested and the mesenteric glands were rather prominent. Spleen cultures were positive for *Br. abortus*. It may be noted that this animal, originally weighing 460 grammes, was the lightest animal in this group and therefore received relatively more of the drug per gramme body weight than the others.

Two days after the cessation of treatment, four of the treated animals were killed and examined in the usual way. All four were infected with *Br. abortus*.

Twenty-three days after the cessation of treatment the remaining animals were killed and examined. As will be seen from Table III, all the animals were infected and there was no marked difference between the two groups.

The results of these two experiments are not very encouraging. It is clear that a proportion of cures can be obtained, but only when the drug is given in relatively enormous doses and is bordering on the toxic limit. The short and intensive course of treatment, given with a view to keeping up the concentration of the drug in the blood stream, was completely unsuccessful; presumably it would have been more successful if treatment had been continued but the results did not seem sufficiently encouraging to warrant any further detailed work.

Summary

Treatment of *Br. abortus*-infected guinea-pigs with M & B 693 in doses bordering on the toxic limit resulted in a proportion of cures but the results were not sufficiently encouraging to advocate its trial on any extended scale or in cattle.

. . . . .

I wish to record my thanks to Messrs. May and Baker (Pharmaceutical Specialities) Ltd. for supplying me with ample quantities of drug for the purposes of this investigation.

References

Chinn, B. D. (1938.) *Proc. Soc. exp. Biol., N.Y.* **38.** 732.

Montgomerie, R. F. (1938.) *Vet. Rec.* **50.** 380.

Wein, B. R. (1938.) Quart. *J. Pharm. and Pharmacol.* **11.** 217.

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POTATOES FOR STOCK FEEDING

Potatoes have a special significance in war-time, not only as human food but as a substitute in animal feeding for the "carbohydrates," such as barley and maize meal, that are at times difficult to obtain. Certain precautions must be taken in feeding potatoes to stock, however, and the Ministry of Agriculture's new "Growmore" Leaflet (No. 10. Unsaleable Potatoes: Their Use in Animal Feeding) explains what should be done in this direction as well as setting out some specimen rations that include potatoes, for beef and dairy cattle, sheep and pigs. The precautions are quite simple and consist chiefly of boiling or steaming the potatoes, slicing to avoid the risk of choking and avoidance of excess in feeding. The tubers must also be clean. Observance of these recommendations will make it quite safe to use damaged ware potatoes or tubers slightly blighted or holed by wireworm. Damaged or slightly diseased potatoes cannot be stored in clamps. The most practical way of storing them on the farm for stock feeding is in a silo pit. Full details of this system of preservation are given in the leaflet, of which single copies are available free on application to the Ministry of Agriculture and Fisheries, 10, Whitehall Place, S.W.1.

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"Official figures published in Berlin yesterday," states the *Daily Telegraph* of December 22nd, "show that on December 15th there were 4,448 farms quarantined for foot-and-mouth disease, compared with 4,371 on December 1st. The disease now exists in 1,710 districts compared with 1,412 on December 1st. It has appeared on 61,845 farms in 19,407 districts since January 1st."

THE VETERINARY RECORD

January 6th, 1940.

"VETERINARY RECORD" PRINTING CHANGES: A WAR-TIME MEASURE

FROM time to time since the Association acquired the *Veterinary Record* changes in type for headings and text have been introduced to bring the journal into conformity with modern practice and conceptions of optical requirements. With this issue we make a further change, dictated by the present need to economise space in view of the difficulties anticipated by our printers, in common with others, in renewing their stocks of paper. In adopting a type of smaller face throughout the journal, the aim has been, therefore, to ensure the maximum degree of saving in space consistent with facility in reading, thereby enabling us to publish the same amount of material as heretofore on a smaller number of pages, while preserving the general layout.

The disadvantages of the introduction of smaller type have thus, we hope, been reduced to a minimum, though the fact that it is purely a war-time measure makes the necessity for its adoption the more to be regretted. Pending the arrival of happier days, when we can revert to a more spacious style of production, however, we ask the indulgence of our readers for the temporary unavoidable departure from our former liberality in size of lettering and in spacing, with the consequent production of a journal less substantial to "handle," though not, we trust, to read.

CLINICAL COMMUNICATION

ANCHYLOSIS OF THE SPINE IN A SHORTHORN BULL

T. ROGER THOMAS, M.R.C.V.S.
Carmarthen

Subject.—A pedigree Shorthorn bull, aged eight years. He was brought from Cumberland seven years previously, and had been in an attested herd for the past four years.

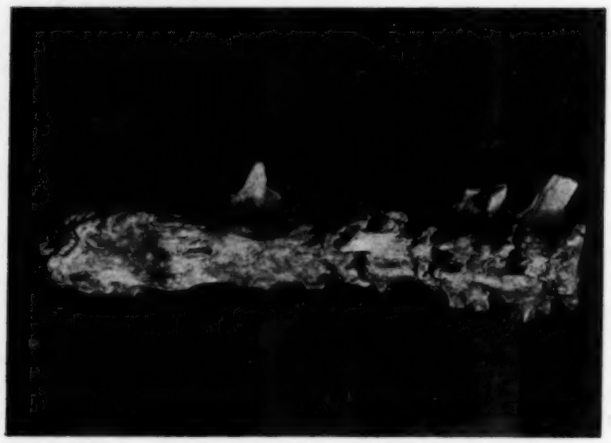
History.—For two or three months he had been unable to serve. On November 2nd he was seen by chance and noticed to experience difficulty in rising with incoordinate attempts to gain his balance. Eleven days later the owner sought advice as the animal was now unable to rise at all. He was found to be lying stretched out on his side and several unsuccessful attempts had been made to raise him. The temperature was 101°, the pulse 90 and respirations 28. The bull strained continually and appeared unable to defaecate and urinate. The appetite was unimpaired.

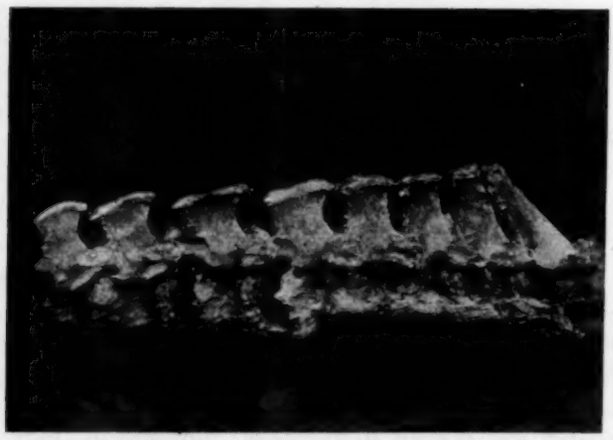
Diagnosis.—As there was no possibility of tuberculosis or trauma a pathological condition of the spinal column was diagnosed, after taking into consideration the symptoms shown on November 2nd.

Prognosis.—This was hopeless, and the bull was destroyed the following day.

Post-mortem Examination.—This revealed no pathological conditions in any organ, but after evisceration two protuberances were noticed on the ventral aspect of the thoracic part of the vertebral column. The posterior one was the larger and was approximately 12 inches long. The other was about 6 inches anterior and approximately 6 inches long. After maceration the eighth to eleventh thoracic vertebrae were found to be anchylosed. There was also extensive exostosis present on the dorsal spines, and transverse and oblique processes, not only of the anchylosed vertebrae, but of the other thoracic vertebrae. This can be seen in the accompanying photographs.

The exostosis extended to the margins of the intervertebral foramina. The floor of the neural canal in certain positions was uneven.





Discussion.—In view of the similarity of the symptoms of incoordination and difficulty in rising, to those seen in aged cows apparently suffering from delayed milk fever, and which do not respond to the usual treatments for that condition, is it possible that anchylosis and exostosis of the vertebral column may be responsible for the symptoms in these cases?

ABSTRACTS

[ANGINA IN DOMESTIC ANIMALS. (Trans. title.) Gratzl, R. (1939.) *Tierärztl. Rdsch.* **45.** 45-50.]

Angina is defined as an inflammatory condition of the region of the throat associated with functional disturbance of the fauces, palate, pharynx and larynx.

Although the author discusses these conditions in all animals, particular reference is made to the horse. In this animal the presence of the guttural pouches adds to the significance of the condition, and it is found that the majority of cases of angina originate from the region of the pouch, whereas in the dog they originate from the tonsillar area.

Of the cases of angina associated with empyema of the guttural pouches under review, 89 per cent. originated from lymphadenitis, with abscess formation, of the pharyngeal lymphatic glands. A characteristic symptom was intermittent nasal discharge as opposed to the more or less constant discharge usually associated with empyema of the other cavities of the head. This intermittent discharge is due to the fact that the pharyngeal orifice of the eustachian tube is above the level of the lowest point of the pouch; so that only during swallowing when the pus is forced out, or during extension and lowering of the head when the pus can flow out naturally, is the discharge noticed. Unless obvious symptoms were present, diagnosis was confirmed by endoscopic examination which was performed by the use of a modified laryngoscope.

The chief line of treatment was directed towards the evacuation of pus. This was performed by either allowing the horse to feed off the ground, in which case the nasal discharge increased, or by irrigation with a metal catheter. It was found more practicable to irrigate the pouch with warm water and force the pus through the eustachian orifice *below* the catheter, so that it drained into the pharynx and posterior nares, than to irrigate with a two-way Günther catheter, in which case the pus is drained through the catheter itself. The danger of inspiration of pus is negligible if the head is kept extended during the operation. [The surgical aspect of this condition is not mentioned.]

C. W. O.

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[SOME OBSERVATIONS ON THE NATURE AND TRANSMISSION OF ENZOOTIC BRONCHOPNEUMONIA (PNEUMOENTERITIS) OF DAIRY CALVES. Sanders, D. A. (1939.) *J. Amer. Vet. Med. Assoc.* **94.** 28.]

The nature of an enzootic pneumonia occurring in calves and yearlings on dairy farms in Florida is discussed. The mortality rate on badly affected farms may amount to 60 or 70 per cent. of the annual calf crop. The disease is characterised by a febrile reaction, gastroenteritis and pneumonia. Animals which survive the infection are under-developed, unthrifty and unprofitable. The disease occurs among calves confined in crowded, insanitary, permanent lots. *E. coli* was isolated from the intestinal tract and *Pasteurella boviseptica* from the lung tissue. Species of *Staphylococci* and *Penicillium* were isolated from the lung tissue of several calves autopsied in advanced stages of the chronic form of pneumonia. Such cases were found to be infested with various species of internal parasites, including: coccidia, whipworm

tapeworms, stomach worms and lung worms. Some were also infested with the blood-sucking louse, *Linognathus vituli*. Normal calves fed with cultures of the *Pasteurella* isolated from diseased lung tissue did not develop the infection. Eight normal calves were exposed to the disease by contact with naturally infected animals. The exposure was made in specially constructed isolation pens of concrete which were cleaned each day. Though a gastroenteritis occurred in the contact animals, the bronchopneumonia typical of the naturally occurring disease did not develop. Nasal and bronchial secretions of animals suffering from enzootic pneumonia, minced portions of affected lung tissue and bacteria-free filtrates of these materials did not reproduce the disease when healthy calves were exposed thereto by the nasal and oral routes. No single predisposing factor has been found that reproduced typical bronchopneumonia as observed under field conditions.

W. S. G.

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[TREATING FRACTURES OF LONG BONES WITH THE REDUCTION SPLINT. Stader, O. (1939.) *N. Amer. Vet.* **20.** 1. 2. 3. 55-59, 54-58, 62-68.]

The usual methods adopted for the setting of fractures have several disadvantages such as the immobilisation of joints, muscle atrophy, and the possible danger of pressure necrosis. The reduction splint is designed to meet the ideal requirements. The apparatus consists of two small metal bars, called pin bars, each carrying two metal pins which are set in at an acute angle. The pin bars are placed on the lateral aspect of the fractured bone, one being screwed into each extremity. These are then connected by an adjustable metal bar, called an extension bar. By various screws, the fracture can be kept in proper alignment by appropriate lengthening and shortening of the extension bar and the extremities can be rotated by screws governing the pin bars. The splint can be obtained in three sizes according to the weight of the dog. It is designed primarily for fractures of the long bones and not for all types of fractures.

The surgical technique adopted is as follows :—

An X-ray is taken to determine the type of fracture and the subject is anaesthetised—using nembutal combined with morphine and atropine although a local anaesthetic is advocated to replace nembutal in weak subjects. In uncomplicated cases the hair is clipped and the site prepared in the usual way, but where laceration of the skin has occurred, a Thomas's splint is applied until the wound has healed. Firstly, the leg is enclosed in a sterilised stockinette and the upper end of the fracture should be set first. The pins are placed in the pin holes, one at a time, and by means of a set screw, the pin is introduced by steady pressure and rotation through the stockinette, skin, musculature and bone, its complete penetration of the latter being noted by palpation of the medial aspect of the limb. The second pin is introduced in a similar manner ; and the other pin bar is then attached to the lower extremity of the fractured bone. The fractured ends are then manipulated into apposition, and the extension bar is fixed in position. It is important that the pin bars do not exert too much pressure on the skin, especially in recent cases where allowance must be made for subsequent inflammatory swelling, and also there should be no gap between the fractured ends. By manipulation of the various screws, correct medio-lateral and antero-posterior alignment and correct extension can be obtained. The result is examined, and if necessary, corrected, after appropriate screening or X-ray examination. A stockinette fixed by elastoplast is advised as a protective covering.

Diagrams are shown illustrating the apparatus and technique adopted.

J. B. T.

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[AFTER-CARE IN THE TREATMENT OF FRACTURES OF LONG BONES. Stader, O. (1939.) *N. Amer. Vet.* **20.** 4. 68.]

The importance of after-care cannot be stressed too much, *i.e.*, after reduction and fixation of the fractured limb.

The description in this article is of the post-operative treatment of fractures of long bones treated by using a complex reduction splint analogous to that used in human surgery. The illustrations of the article make any obscurities in the text amply clear.

The Dressing.—The object of the dressing is to maintain the surgical field in an aseptic state. This is accomplished by packing round the reduction splint with sterile cotton wool and then applying a figure-of-eight bandage. Over all the above is pulled a stockinette which is held in place with sticking plaster at top and bottom.

Pressure Necrosis.—This is liable to occur only when there is excessive traumatic swelling. In this latter case daily examinations should be made—otherwise no interference is necessary unless there is excessive seeping from the wound or an abrupt rise in temperature.

Temperature.—In a series of 75 fracture cases a rise of temperature to 101° F. or 103° F. was noted on the third or fourth day. This is probably due to auto-intoxication from the damaged tissue of the fracture area.

A rapid rise to 106° F. should receive immediate examination—first locally, to eliminate infection of the area either of the soft tissues or the bones, *i.e.*, osteomyelitis ; secondly, to eliminate other conditions which may give rise to this pyrexia, *e.g.*, febrile disease—internal injury.

If the cause is osteomyelitis the reduction splint should be replaced by a Thomas's splint and antiseptic dressings. No fatalities from bone infection are recorded.

If there is excessive seepage, the dressings should be renewed daily and if infection supervenes the usual treatment should be adopted.

Some animals use the limb in a few days but this is dependent upon the temperament of the animal and also on the amount of traumatised tissue.

Hospital treatment is preferred to home treatment. The length of time that the splint should remain on varies from three to six weeks. X-ray plates may be used to decide when they should be removed. A light splint bandage may be applied on dismissal of the patient, especially in fractures of the tibia and also the fore-leg.

D. McF.

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[HEPTALDEHYDE AS A TUMOUR INHIBITOR. Baumann, C. A., Kline, B. E., and Rusch, H. T. (1939.) *Proc. Soc. Exp. Biol. Med. N.Y.* **39.** 354-356. (1 tab. 4 refs).]

Recent work by Strong (*Am. J. Ca.*, **28,** 550 and **32,** 227, and *Science*, **88,** 112) has indicated that a

diet containing commercial heptaldehyde will liquefy and cause regression of spontaneous tumours of mice, and that heptaldehyde injections will elicit a similar response in spontaneous mammary tumours of dogs. A study was made, therefore, to determine whether heptaldehyde would inhibit all tumours or whether its action was confined to certain tumour types. Accordingly the drug was fed in various concentrations with Steenbock stock ration to mice with five types of tumour, *viz.*, spontaneous mammary adenocarcinoma, primary ear tumour induced by ultra-violet light, primary epithelial tumour induced by painting with benzypyrene, primary sarcoma induced by benzypyrene subcutaneously, and a transplantable spindle-cell sarcoma.

The feeding of heptaldehyde failed to prolong the life of any of the experimental animals, and in some cases seemed to hasten the end. Nor did it alter the character of the tumours. Only one subject out of 97 gave positive results, and this died soon after. A marked discrepancy is noted, therefore, between these observations and those of Strong *et alia*.

D. D. O.

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[THE CORYNEBACTERIUM PYOGENES ANTI-TOXIN CONTENT OF ANIMAL SERA. Lovell, R. (1939.) *J. Path. Bact.* **49.** 329.]

C. pyogenes forms a filterable toxin which is lytic for red cells. The potency of the toxin can be measured by a haemolytic test and the strength of a sample of antitoxin by its power to inhibit lysis.

Taking one sample of antitoxin produced from a rabbit as a standard, the author has estimated the antitoxin content of the sera of random samples from cattle, sheep, pigs, goats, horses, rabbits and man. A few observations were made with sera from dogs and monkeys. The distribution of antitoxin in the different animal species is shown by frequency tables, and there is a correlation between the presence of antitoxin in the sera and the susceptibility of the animal species to infection with *C. pyogenes*. For example, there is a higher mean and a greater variability in the antitoxin values in cattle, sheep, goats and pigs than in man or rabbits. Horses occupy an intermediate position. In cattle there is an association between increasing age and high antitoxin values and there is also an association between high antitoxin values and the stimulus provided by natural infection with *C. pyogenes* or the injection with *C. pyogenes* toxoid.

It would appear from the evidence given that the high antitoxin values even in apparently normal animals, are due to the stimulus provided by living *C. pyogenes* and that, therefore, a large number of individuals belonging to the species which are susceptible to infection, namely, cattle, sheep, goats and pigs, normally carry this organism. The question of the pathogenesis of *C. pyogenes* infection is raised and it is suggested that it may often be endogenous in development.

R. L.

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[INFECTION OF A PEACOCK WITH ERYSIPELOTHRIX RHUSIOPATHIAE. FOLLOWED BY A CASE OF HUMAN ERYSIPELOID. Greener, A. W. (1939.) *Brit. J. Dermatology & Syphilis.* **51.** 372.]

Erysipelothrix rhusiopathiae not only causes swine erysipelas but is associated with disease in birds, lambs and mice. It has also been isolated from a cow and a horse and is the cause of the human skin condition *erysipeloid*.

A peacock was found dead and the conclusion is that it had died suddenly. *Erysipelothrix rhusiopathiae* was isolated with ease from the blood stream, indicating a septicaemic condition. The strain was very virulent for mice and culturally was a " smooth " form which according to the literature is associated with acute cases of disease. The bird's heart was examined by a colleague with bare hands and 28 hours later there developed a reddish-purple swelling on the back of the hand accompanied by local itching and some pain. It was followed by lymphangitis, swelling of the axillary glands and a slight rise of temperature. After a short course of sulphanilamide the lymphangitis and lymphadenitis subsided but one week after the onset there was a recurrence of the symptoms. The following day, 25 c.c. anti-swine erysipelas serum (W.P.R.L.) was given intramuscularly and 5 c.c. around the local lesion. Recovery was rapid and there was no further relapse.

The evidence is strongly in favour of the human case being due to the dead peacock and a warning is given of the danger of handling animals infected with this organism. There is no doubt of the great variation in the virulence of the organism and this appears to apply especially to those which infect birds.

R. L.

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[BIOLOGICAL STERILIZATION OF FAECES PARASITIZED BY NEMATODE LARVAE. Descazeaux, J. (1939.) *Bull. Acad. vét. Fr.* **12.** 136-139.]

Descazeaux recently demonstrated the ability of two species of fungi, *Dactyella bembicoides* and *Arthrobotrys oligospora*, to ensnare and digest Strongylidae larvae of horses. If the larvae were species of *Strongylus* or *Trichonema*, the formation of lossos by *D. bembicoides* and snares with sticky arcs by *A. oligospora* was stimulated, digestion being completed in four to five days.

The action of these fungi was determined in crystallising jars containing faeces (with parasitic eggs or larvae) mixed to a paste with wood charcoal and water. These were covered with Petri dishes containing a thin layer of agar (made up with liquid expressed from faeces or with the fluid portion after maceration of faeces) this medium bearing a 15 to 20-day growth of one or other of the above-mentioned fungi. The natural ascent of larvae under suitable conditions of moisture was stimulated by placing moist strips of blotting paper up the sides of the jars between the faeces mixture and the growth of fungi on the inside of the inverted Petri dishes. A photomicrograph illustrates the snaring of larvae by *A. oligospora*.

In the course of the experiments a species of parthenogenetic *Rhabditidae*, probably *R. stercoralis*, was encountered and its morphology is described in more detail than usual. The reaction of both species of fungi towards larvae of Strongylidae spp., and the adult female Rhabditidae spp. and larval forms which hatched out from their eggs, was different. The adult and larval forms of the latter were ultimately enveloped within 15 days and then digested.

C. V. W.

REVIEW

[HOBDAY'S "SURGICAL DISEASES OF THE DOG AND CAT." Fourth edition by James McCunn, M.R.C.V.S., L.R.C.P. (Professor of Anatomy, Royal Veterinary College, London). Pages 395. Illustrations 311. Price 21/-. Baillière, Tindall & Cox.]

Professor McCunn has tackled the difficult task of revising and, where necessary, modernising a well-known standard work.

This is an undertaking that calls for both tact and discretion in no common degree, and Professor McCunn is to be congratulated on carrying it through with notable success. Since the work as it originally appeared is so well known there is no need to devote space in these columns to describing its contents in detail. Suffice it to say that the latest edition has been enriched by descriptions of the more modern advances in canine and feline surgery, that some material that was out of date or redundant has been deleted, and that many excellent illustrations have been added, some of the best coming from the pencil of Professor McCunn himself. The result is a book that is as useful in diagnosis as in treatment, a rare compliment but one that can here be properly paid.

The new edition is invaluable alike to practitioner and student; we can thoroughly recommend it to both.

REPORT

MINISTRY OF HEALTH

"On the State of the Public Health"

The Twentieth Annual Report of the Chief Medical Officer of the Ministry of Health, Sir Arthur MacNalty, for the year 1938 was published on Tuesday, Nov. 28th, 1939 (H.M. Stationery Office, price 3s. 6d.)

Progress and the Public Health

The Report begins with a review of the nature of progress. Life in primitive society is not so healthy as is sometimes supposed, and the true condition is cloaked by the law of survival of the fittest. Civilisation has its cost; certain diseases follow in its train, *e.g.*, tuberculosis. Beside the "new humanity" of the Eighteenth Century improvements in public health began to appear, and the population increased rapidly. Then came the progress of the Industrial Revolution, accompanied by new problems, especially in the domain of health. It can be concluded, however, that the growth of the health services, and the proof of their effectiveness as shown by the improvement of the nation's vital statistics, is real evidence of progress.

Vital Statistics

In 1938 there was a rise of 10,647 births over the number registered in 1937, representing a birth rate of 15·1 per 1,000 living—a slight improvement on the rate of 14·9 for 1937. The infant mortality rate is 53 per 1,000 births as against 58 for 1937 and is now the lowest on record. The five principal killing diseases remain the same as for many years past and occur in the same order, *viz.*:—

(1) Diseases of the heart and circulatory system.
(2) Cancer—malignant disease.
(3) Bronchitis, pneumonia and other respiratory diseases.
(4) Diseases of the nervous system.
(5) All forms of tuberculosis.

If, however, the diseases are re-arranged to show the principal killing diseases operating during the years of working life—15-65—then tuberculosis takes the third place instead of the fifth and diseases of the nervous system occupy the fifth place.

General Epidemiology

This chapter presents many interesting features.

(i) The incidence of scarlet fever is practically undiminished. This is probably also true of other forms of streptococcal infection. Fortunately, however, the type of the disease continues to be mild and its mortality remains low.

(ii) The deaths from measles and German measles numbered 1,641, being one-third higher than in 1937 and the third lowest in the past ten years. The mortality, while on the whole declining, naturally fluctuates according to the epidemic prevalence of the disease in a particular year.

(iii) The notified cases of diphtheria were 65,008 as compared with 61,341 in 1937 and 57,795 in 1936. The fatal cases numbered 2,931 giving a fatality rate of 4·5 per cent., as compared with 4·8 per cent. in 1937 and 5·3 per cent. in 1936.

Diphtheria is the principal killing disease among children of school age. In the last few years the number of deaths from diphtheria have exceeded the number from measles and from whooping cough. An effective method of immunisation is available, and with willing co-operation of the public an immense reduction in the incidence and number of deaths from the disease could be secured.

(iv) Eighteen cases of smallpox were notified. With the exception of one doubtful case, they all appeared to derive from a source outside this country.

(v) There was an increased prevalence of poliomyelitis (infantile paralysis) in the last two quarters of the year. Special investigation was made of outbreaks in Essex and Wales.

In relation to epidemic prevention the *Enteric Group of Fevers* has again come into prominence in recent years. Not only have these diseases been spread by water and milk, but several outbreaks have occurred due to the handling of food by infected persons or by "carriers." Chapter IV is devoted to a special study of this important group of fevers, and records modern progress in their diagnosis, prevention and control.

The Relation of Food to Health and Disease

The Advisory Committee on *Nutrition* has been engaged in three main investigations; a family budget inquiry, the distribution of the population in income groups, and dietary surveys. It has co-operated with the Technical Commission on Nutrition of the League of Nations. Researches on the ante-natal composition of the blood and on growth rate in babies have been carried on under the aegis of the Ministry.

Milk

The establishment of a State Veterinary Service in 1938 under the Agriculture Act, 1937, necessitated the issue of

the Milk (Special Designations) Amendment Order, 1938. This resulted in differences in administration and some temporary difficulties. A table indicates the recent progress achieved in designated milk production, *e.g.*, the number of producers' licences valid on March 31st, 1936, was 15,451 and on March 31st, 1939, was 26,118. In general, widespread improvements in dairy practice have resulted from the milk grading scheme with consequent improvement of the milk supply. Thirty-eight cases of undulant fever were collected in 1938 as against 56 the previous year but they can only be taken as a part of the number of cases which must have occurred. A note is subjoined on undulant fever in New Zealand.

Control of the Purity of Food

Great Britain is one of the few countries which have not adopted a comprehensive system of food standards, leaving the responsibility on the local authorities and the Law Courts. Growing difficulties of this system have led to the insertion in the Food and Drugs Act, 1938, of provisions enabling the Minister of Health to make regulations as to the composition of foods. The demand for legislative food standards has come largely from commercial and administrative quarters; but it is the public who are entitled to receive the main consideration. The necessity for careful discrimination in the prescription of standards was emphasised in the Report of the Departmental Committee on the Composition and Description of Food, 1934. It is important that no standards should be established without adequately protecting the consumers from commercial exploitation and ensuring that there is no undue restriction in the choice of foods. On the purely technical side the question of enforcement of regulations will require careful consideration. Each food will present a different problem requiring individual consideration. The Act of 1938 is also directed against the use of misleading labels and advertisements in regard to food and may well serve as a check on extravagant claims as to the vitamin content of commercial food preparations.

Cancer

The mortality from cancer has again risen, the increase being more marked in the case of women. There were 68,605 deaths in 1938 as against 66,991 in 1937, an increase of 1,614, while the increases for the two previous years were 637 and 1,847. Although deaths certified as due to cancer have risen steadily since 1851 it is impossible to say if there is a real increase in the disease. Advances in diagnosis and increased longevity both tend to increase the numbers. Cancer is a problem to be attacked by organised public health effort, and fortunately this can be done to-day with more confidence than in the past. The Minister has appointed a sub-committee of his Medical Advisory Committee to advise on cancer problems.

Tuberculosis

The introduction to the chapter surveys the trend of changes in the institutional treatment of tuberculosis. There were 26,176 deaths from tuberculosis in 1938 as compared with 28,529 in 1937 and 35,818 in 1931. The rate of decline in mortality has been greater since 1931 than at any other time in this century and has been most notable amongst young adults and children. Much of the improvement may possibly be attributed to better housing and the diminution of overcrowding. Primary notifications of pulmonary tuberculosis were 37,879 in 1938, as compared with 39,630 in 1937. There was a slight increase of new cases of non-pulmonary tuberculosis from 12,661 to 12,810, but it was accompanied by a fall in the number of deaths.

Bone and joint tuberculosis, which requires hospital treatment of a very specialised character, shows a greatly reduced mortality, and the proportion of children treated for the disease is diminishing.

Tuberculosis in Wales.—The steady fall in the tuberculosis death rate since 1931 was continued in 1938 when the figure of 812 per million is the lowest yet recorded in Wales. Yet it has lagged behind the English figures, and in 1938 the Minister appointed a Committee to investigate the matter and a Report was published this year which drew attention to a number of defects. The more pressing needs are to be met by the provision of 800 beds in hutments, and practical measures are being devised to further tuberculosis work in Wales.

Water Supplies

During 1938 the Minister issued a circular reminding water undertakers of their responsibility to ensure that public water supplies under their control were wholesome. Attention was drawn *inter alia* to the necessity of employing a qualified engineer, and for effective collaboration between the water undertakers and the local authorities. In January, 1939, the Minister also issued a memorandum on the "Safeguards to be adopted in day-to-day Administration of Water Undertakings." The danger of relying on a single line of defence between the consumers and a polluted water supply was emphasised.

Conclusion

The concluding chapter of the report summarises the general position, and concludes that the audit of birth and mortality presents encouraging features. The low infant mortality rate is gratifying, but the knowledge that it is still higher than certain foreign rates is a strong incentive to press on with those measures directed to reducing this mortality. The results of the campaign against tuberculosis also give cause for satisfaction. The chapter on General Epidemiology is summarised, and with the material on International and Port Sanitary work, indicates the ceaseless watch which must be maintained to guard against the spread of epidemic diseases.

Appendices

The appendices deal with such varied subjects as puerperal mastitis, chick embryo vaccine lymph, an outbreak of toxic polyneuritis on a vessel and hydatid disease in Wales.

When Mr. J. Rowe, of Higher Wyld Farm, Monkton Wyld, Axminster, found the tap had been pulled out of a barrel of cider, and half the contents wasted, investigations proved that the culprits were two of his pigs. The animals were discovered lying on their backs helplessly intoxicated, but after a few hours the effect wore off.—*Farmer and Stock-breeder.*

VETERINARY ASSOCIATION REPORT

SOUTH AFRICAN V.M.A.*

ANNUAL GENERAL MEETING AT ONDERSTEPOORT

The annual general meeting of the South African Veterinary Medical Association was held at Onderstepoort, on Wednesday, November 15th, 1939.

On account of the war, a comprehensive programme dealing with the various aspects of the production of clean, safe milk in South Africa was cancelled, and the meeting was confined to the transaction of formal business.

In the absence of the President of the Association, Mr. S. T. Amos, of Durban, on account of ill-health, the Chair was taken by Dr. H. H. Curson. The meeting passed a motion wishing Mr. Amos a speedy recovery.

A message of greetings from the National Veterinary Medical Association of Great Britain was read, and the Secretary was instructed to reciprocate.

The election of the new Council for 1939-40 resulted as follows :—

President.—Mr. S. T. Amos.

Vice-President.—Dr. H. H. Curson.

Hon. Secretary-Treasurer.—Mr. S. W. J. van Rensburg.

Members of Council.—Dr. R. Alexander, Mr. A. S. Canham, Mr. J. L. Dickson, Mr. A. M. Diesel, Dr. P. J. du Toit, Mr. A. C. Kirkpatrick, Dr. D. G. Steyn, Dr. A. D. Thomas.

Mr. F. J. Carless of Mooi River, Natal, was unanimously elected as an Honorary Life Vice-President of the Association. Mr. Carless is only the third person elected to this post, the other two being the late Sir Arnold Theiler and Colonel J. Irvine Smith, late Director of the Johannesburg Abattoir.

In proposing him, Dr. CURSON stated that Mr. Carless had come of an old English veterinary family, had been in South Africa since 1895 and had always shown a keen interest in the veterinary profession. He had been President several times, and for years represented the Association on the Veterinary Board. "He also takes a very prominent part in public matters, especially agriculture and agricultural education," added Dr. Curson, "and was a member of the Meat Export Board and of the Shipping Board. By his tact, personality and character he has set an example of which the profession can be proud."

S. W. J. VAN RENSBURG, *Hon. Secretary.*

*Association affiliated to the N.V.M.A. Report received for publication December 18th, 1939.

Some farmers scoffed at the advice which came from the Ministry of Agriculture in the autumn urging pig-keepers to go back to nature in the feeding of their pigs and let them find more of their sustenance in beech mast, acorns, chat potatoes, and other food material which is normally wasted in this country. But it was sound advice. The pig is by nature a scavenger. He has been pampered in recent generations when scientists and millers have devised perfectly balanced rations of the most palatable foods to tickle his appetite and encourage him to feats of weight-for-age. This is profitable commercial practice in ordinary times. To-day if we mean to carry on our breeding stock we have to improvise in feeding pigs.—*The Times.*

PERSONAL

Emeritus-Professor Share Jones and the University of Liverpool

Notable Tributes at "Retirement" Presentation

A large company, which included representatives of all the Faculties, was present in the Senate Room of the University of Liverpool at noon on December 6th, 1939, when a presentation was made to Emeritus-Professor Share Jones, M.D. (V.*h.c.*), D.V.Sc., M.Sc., F.R.C.V.S., who retired recently from the Directorship of Veterinary Studies and from the Chair of Veterinary Anatomy in the University, in appreciation of his services to the School of Veterinary Science and to the University during a period of 35 years.

The Vice-Chancellor, Dr. A. D. MCNAIR, C.B.E., M.A., LL.D., F.B.A., who presided, announced the receipt of apologies for absence from the Lord Mayor, Mr. R. H. Armstrong, Sir Robert Kelly, Professor H. J. Channon, Professor Henry Cohen, Professor A. Bruce Boswell, and Professor L. C. Martin. He then read the following extract from a letter received by him from Emeritus-Professor Hope: "My associations with Share Jones have extended over so many years and have been so close, friendly and helpful in the work of the University that it will indeed be a disappointment to me to be unable to attend his farewell function. His long and devoted service in the advancement of Veterinary Science has resulted in many measures of amelioration of the pains and penalties of the animal world. I shall join with you all in your good wishes."

Proceeding, the Vice-Chancellor said: I feel it a great compliment that I have been asked to preside at this gathering and to make a presentation to our colleague because I am such a newcomer here, and most of you have known him for very many years indeed, including some who have known him for the whole of his association with the University, which amounts to 35 years. I have only known him for two years and one term, and therefore I am merely going to try and give you certain impressions that I have formed of him, although I realise that they are bound to seem to those of his friends who knew him longer, a very inadequate statement of our esteem and affection. Now it so happens that Professor Share Jones was almost the first person in this University with whom I was thrown into intimate contact. Up till then (for a reason I am about to mention) —before October 1st, 1937, when I took office—I think the only two Professors of the University whom I had met were Professor Abell and Professor Proudman, and for the reason that they both took part in "vetting" me. Incidentally that word is a very great compliment to your profession, Professor Share Jones, because it has now passed into common usage and when we wish to indicate that a person or a thing has been properly examined, we say that we have properly "vetted" him. You can understand that with Professors Abell and Proudman in mind as the typical Liverpool professors, I got a surprise when, on the occasion, at the beginning of October, 1937, of the visit of the Veterinary Education Committee to Liverpool, there blew into my room a breezy and prosperous North Wales squire. He very quickly took me in hand and we were closeted for many hours in preparation for the enquiry that was being held by the Veterinary Education Committee. It was Professor Share Jones who initiated me somewhat into the mysteries of your profession, who taught my infant lips how to lisp the

language of your science, who showed me how to lead the members of this Visiting Committee to water even if we could not make them drink, who showed me (if I may borrow a word from Mr. Elam's department) how to "restrain" them, and in that way I got to know Professor Share Jones very closely in the first two or three weeks after my arrival at this University.. We had a pleasant and interesting time with the Committee, and when eventually we had said good-bye, Professor Share Jones was good enough to come and see me, and it gave me great pleasure when he thanked me for what I had done and told me that I had the love of the animal in my heart. Now if ever there was a man who had the love of animals in his heart, it is the man to whom we are assembled to do honour. (Hear, hear!) I take that as my first characteristic—that Professor Share Jones really does love the animal creation. He does not regard them simply as something to be exploited in the interests of men. There is a remark by Herbert Spencer which is very much in point. He said that "the behaviour of men to the lower animals and the behaviour of men to each other bear a constant relationship." That is eminently illustrated in the person of Professor Share Jones.

Now the second characteristic that I would bring to your attention is the efforts that he has made in the last 35 years to raise the status of his profession. Every profession has gone through the struggle of raising itself up from a handicraft to the dignity of a profession. The barber's pole still reminds us that it is not so very long ago that the surgeon was able to cut himself adrift from the barber and become a member of a learned profession, and we have watched in the last two or three decades a very great rise in the standing of the veterinary profession. That has always been, so far as I have been able to judge, in the forefront of Professor Share Jones's ideals. (Applause.) During his career he has contributed to place the profession on a higher basis, by his work on numerous Government Committees and on the Livestock Commission, of which he is now a member, and by his writing and research.

And thirdly, let us remember him as a teacher. When Professor Share Jones first became associated with this University, there were—if we exclude the migrants from Edinburgh who were after all not really our own flesh and blood—something like 20 to 30 students in this school, and now the Veterinary School is one of our strongest schools with a complement of 160 students, and so steady has been the rise in the type of student admitted to the School that last year all of the students were accepted to read for the degree as well as for the diploma.

The next characteristic that has impressed me is Professor Share Jones's strong civic spirit and his conception of the duty of his profession, not merely to concern themselves with the cure of animals and the prevention of animal disease, but to promote the economic welfare of the country by making the best use of the natural resources of the country. It is here that, as it seems to me, Professor Share Jones's political interests and parliamentary ambitions link up with and derive inspiration from his professional work. There was an occasion some years ago when Professor Share Jones's sphere of activity might have been transferred from Liverpool to Westminster. I understand that he has again placed himself in danger of being transferred from Pentrebychan Hall to Westminster the next, time a General Election should occur. I am not supposed to have any politics, and therefore it would appear improper for me to express any opinion on the question whether or not we hope he will succeed. (Laughter.)

And, lastly, I wish to remind you all of his generosity, both in spirit and in action, and his friendship. But for the present circumstances, there would have been a much larger body of his friends here to-day, but I have formed the impression in the last two years that when one speaks of Share Jones there kindles in most people's faces a feeling of affection for him.

Indicating that he would defer making the actual presentation (of a radio-gramophone) until Professor Abell and Professor Craig had spoken, the Vice-Chancellor added: I should like, before I close, to convey to you and my fellow lawyer, Dr. Mary Share Jones, our very warm wishes for long and great happiness together in that house which I have had the privilege of entering, and which I know you love so well, surrounded by the animals that you love so well, and I am quite certain that, just as we shall not forget the services that you have rendered to us, you are not likely to forget the days and years of service that you have spent amongst us. (Applause.)

Professor Abell supported the account the Vice-Chancellor had given of the distinguished service Professor Share Jones had rendered to the University and to the community. He said: When I see people here who are much older friends of Share Jones than I, I think perhaps it is almost inappropriate that I should speak. I also feel it rather out of place that I should try to add anything to the words so admirably expressed in the letter to which your signatures are appended. The letter has been drafted by the official phrase-maker of the University, whose language may be described as silver-tongued and sincere. The Vice-Chancellor has dealt broadly with Professor Share Jones's work so I need not do so. I find it very difficult as one who has not relinquished his work here after 35 years to enter into the mind of a man who has. One can only look externally upon his work. One cannot look into his heart and mind. One can see his successes and one can see his failures, but one cannot see what his hopes and disappointments may have been. At the same time I am pretty sure that when Professor Share Jones looks back upon the work that he has done in the University he can derive much satisfaction. He must realise that he is one of the very few men who have seen their work extend in scope and importance to such a degree. Although I do not want to talk much about his work, I would like to recall his campaign of the middle 'twenties, and the way in which he fought most bravely and appeared to suffer defeat. As a matter of fact those defeats have turned out to be victories. He is a man whose ideas for the training in Veterinary Science were much in advance of many of those in his profession, and were on a much broader basis. If it were necessary to place a seal upon his work, one has only to look at the report of the Veterinary Education Committee appointed by the Ministry of Agriculture to see how his views are supported and the extent to which his recommendations for development have been adopted. In 1925 the majority of the students were people who were only taking the diploma course. As the Vice-Chancellor has pointed out, now, after 15 years, practically every single man who leaves here has the hallmark of a Liverpool degree upon him. It is to those men, whose calibre is equal to that of the students of any other department in the University, that we have to bear the torch of learning. They will bring honour to the profession, to us, and, incidentally to Professor Share Jones who has encouraged them so much.

I have said what I want to say about his work. Now I want to say something about him. I have been privileged to see Share Jones in his home, and it is not until you see him in his home that you get to know him. I have got several pictures which I would like to portray if I can. You must go into Professor Share Jones's morning room when he and his wife are there. There you will find legions of cats and dogs lying down together. They are all quiet. Occasionally they look up at him with affection because they know him. They know that he loves them and cares for them. You then see where Share Jones's heart is. You see indications of his loyalties to his friends and his devotion to the science which he loves so much. In his pastures you will see the sick, halt and lame, they also look to him for help. Perhaps that is natural.

Or, again you may see Share Jones's majestic figure striding across the top of Offa's Dyke. I can imagine what the famous ex-king of Mercia must have felt when venturing to the Welsh Marches only to find men of Share Jones's stature, vigour, eloquence and fighting qualities confronting him. But those days when the English were fighting against the Welsh have gone. The Welsh have ruled over us for many years, and we of England are proud of the Tudor kings who ruled us and helped build up our characteristics and our traditions. Sometimes the Welsh people forget this. The Welsh have contributed so much to our national character that I would like them to bear that in mind sometimes.

There is another picture which impressed me very much. You have just to hear Dr. (Mrs.) Share Jones talking about professional matters to realise the important part which she has played in his work. You will realise that she is a woman with keen interest and intellect, intensely interested in him and his work. You will find her always tempering his mercurial spirit and tempestuous energy, guiding here, restraining there, and generally helping him with firm but gentle hands in his work. She, I am sure, has helped the University tremendously in helping him. There is one other picture which I want to draw. It is of a frivolous character, but this gift we are making to him reminds me of it. It illustrates his energy of body and mind. Professor Share Jones gets up with the lark and also keeps company with the owl. Many a night has he dragged me from my bed into my very cold study to listen to his eloquence on Veterinary Science or politics or agriculture, and his advocacy on behalf of the under-dog. On returning home about midnight one night, an evil thought came into my mind. I thought I would ring him up and get him out of bed. When I got through, I said "Look here, you ought to be in bed at this time of night." To my disappointment he said "I am." So I am very pleased to know that he is cultivating, or about to cultivate one other virtue—he is going to listen. I look forward to the time when I shall see him sitting in front of this machine listening in.

It gives me much pleasure to convey your best wishes to him and to Dr. Mary Share Jones for very many years of health and happiness in their retirement. But neither of these people is of the stuff of people who retire. They will never retire. They will drop in the furrows which they continue to plough to their life's end. (Applause.)

Professor J. F. Craig added his tribute to the great personal qualities and the work of Professor Share Jones and associated himself with all that had been so well said by the Vice-Chancellor. He was glad that these tributes should be paid while Professor Share Jones was still with them. Their acquaintance and friendship began while they were still attached to the School in which they received their professional training and had continued uninterrupted outside the University for the most part, but for the last few years as colleagues in the Veterinary School. He could therefore claim that he knew Professor Share Jones for a longer time than anyone in the room. They had many views in common, but although they differed on occasion, their differences were not animated by personal rancour and never interfered with their friendship.

"Professor Share Jones has always had a high conception of the value and scope of Veterinary Science," proceeded Professor Craig. "Many of his ideas and schemes were not popular when he first gave expression to them, but what one realised was that he had the courage of his convictions and persisted in his views in spite of strong opposition and personal inconvenience. I have always admired him for his courage. He must now be proud in the knowledge that many of his ideas have been generally accepted while others are still the subject of discussion. In these respects he has been a pioneer and has met with and overcome the difficulties of a pioneer.

"He came to this University in the first instance because the Veterinary School was to be developed as an integral part of the University and it is largely through his energies that the School has attained its present position.

"I need only add that I am sure that although he has retired and his interests may change in other respects he will continue to look with sympathy and promote the welfare of the University, the Veterinary School and Veterinary Science.

"May I hope that, when he is listening to the radio, with which he is being presented, when the announcer says 'I wish you well every hour of every day,' he will know that wish is ours for him." (Applause.)

The Vice-Chancellor then presented Professor Share Jones with a wireless with gramophone combined, "and together with it this address which is a very charming attempt to put into permanent form the views of your colleagues towards you and their good wishes."

The University Tribute

The University tribute (inscribed in the presentation album, wilth the arms of the University) was as follows:

TO

JOHN SHARE JONES

M.D. (V.*h.c.*), D.V.SC., M.SC., F.R.C.V.S.

At this time when you withdraw from active participation in that department of our University where you have spent 35 years of your life, we desire to pay our tribute to those qualities of mind and heart which have distinguished your labours here and by which we shall remember you.

We have known your courage, your loyalty, your persistent devotion to a cause and, not least of all, your humanity and kindliness. Your life has been given not alone to the science of Veterinary Anatomy which has represented the field of your professional labours, but also to the arts of healing and of understanding; those quiet and trustful creatures who are commonly called the friends of man have found in you that man can be no less a friend to them.

To one of your restless energy, retirement may not permit leisure, but it must surely bring the contentment of battles well-fought, of causes devotedly served and of high standards faithfully maintained. And whatever new interests the coming years may

contain, we are confident that old friendships will endure; that circle of friendship, of which the University must always remain the focus, includes yet another and most learned graduate in the person of your wife, Dr. Mary Share Jones.

The signatories to the tribute included the Lord Mayor of Liverpool, Pro.-Chancellor of University, President of the University Council, the Vice-Chancellor of the University, the Pro.-Vice-Chancellor, Deans of Faculties, Emeritus Professors, distinguished Professors in the faculties of Arts, Science, Law, Medicine and Engineering and the Schools of Architecture and Veterinary Science.

Inscribed on the radio-gramophone was the following: "Presented to John Share Jones, M.D. (*v.h.c.*), D.V.Sc., M.Sc., F.R.C.V.S., Professor of Veterinary Anatomy and Director of Veterinary Studies in the University of Liverpool, by colleagues in the University, on the occasion of his retirement. 1904-1938."

Professor Share Jones's Reply

In his reply to those who had spoken so eulogistically of his services on behalf of the University, Professor Share Jones said that he could not find the phraseology that could possibly convey to them adequately his innermost feelings at that moment. He was deeply impressed and indeed touched by the very kind speech of the Vice-Chancellor who had expressed himself in such generous terms and also by what the Pro. Vice-Chancellor, Professor Abell and Professor Craig had said.

The Professor gave a brief history of the School of Veterinary Science. He said they came to the University when Liverpool became a University in its own right; it had only just broken away from the Federal Victoria University. He remembered how their friends the engineers had gained entrance to the old University College some years previously and could then imagine what the old Professors of the Classics thought when chimneys and machinery were being erected in the college. What, then, would they think when veterinary men brought their animals, horses, sheep, pigs, etc.? They were indeed an innovation.

They had no endowment, they had no buildings—not a brick that they could call their own. An old greenhouse that had been converted into a small-animal house was lent to them by Boyce and this was converted into a dissecting room.

Reviewing briefly the history of the school in the University, Professor Share Jones said that some of the outstanding features were, firstly, the establishment of this division of science on a solid foundation by endowment of teaching and research. He regarded this as vitally more important even than expenditure on buildings which, as Kuno Meyer emphasised, might at any time be burnt down. No other British school was now so well placed as Liverpool in this respect. Not one was on such a sure foundation. Even the school that was often cited as being the greatest in the Empire would close down at any moment but for the generosity of the Ministry of Agriculture. This in the opinion of Professor Share Jones was not a satisfactory position in which to place a division of professional education. If kept outside the University a branch of education, whether it be technical or professional, was outside the education stream. His connection with University colleges in his earliest years had demonstrated this to him and his main object in coming to Liverpool was to do what he could to establish veterinary education as an integral part of our general University system on lines similar to those on which other divisions of learning had been established. He now felt that after 35 years, half the allotted span, that had been accomplished at Liverpool. (Applause.)

Secondly, there was the spirit that had been developed amongst the students for University education and graduation. At first not a single student was qualified to take a course for a degree had one been available. The new school—established in the face of great opposition, even inside the profession, and with much advertisement in consequence—seemed to attract the adventurous type, the type characteristic more of Newmarket, who was endeavouring to get away to Oxford but having nevertheless only just left Newmarket. (Laughter.) Many came to have what they considered to be a good time—some amusement—got it and then left.

The veterinary gathering were a motley crowd noted for many things. He recalled a dinner to 19 new members of the staff, including veterinary members, when he appealed to those present to suspend their judgment of veterinary men until with the effluxion of time that judgment could be based upon actual experience of them. If they would do this he hoped they might find amongst those engaged in Veterinary Science who devoted themselves to what were termed the lower animals, some imbued with the real spirit of education and disciples of Pestallozzi himself. After 35 years he invited that judgment now.

They in Liverpool with the sympathy and support of Dale, Hope, Sherrington and others, took a bold step and decided to institute a full degree that would demand a greater expenditure of time, effort and money than any other similar degree or diploma. To this day it remained the only full veterinary degree granted in Britain. The appreciation of the degree had been slow but very sure until at present it was reflected in the striking figures the Vice-Chancellor had given. In fact there were more candidates taking the course for this degree than at any other centre in Britain, probably more than at all the other centres combined (applause), and since it was not a licence to practise and not of any direct commercial value they were taking it with the highest possible motive as evidence of academic achievement. There was no finer spirit in any other Faculty or School. (Applause.)

Professor Share Jones, referring to the University as a whole, expressed his profound gratitude to all his colleagues in the different faculties for the generous help he had always received.

His appreciation of Senate was unbounded—his admiration for the fairness and thoroughness with which all the problems that came before it were considered was great. He assured them that he would miss Senate. There the members were placed in a position of independence with freedom to express their own points of view. There all important branches of learning were or should be represented, and the collective judgment on the points raised secured.

He felt that great as the chief functions of the University had hitherto been in the extension of knowledge by research and instruction in the results secured, it would in the future play an even greater part in our national life. To him it appeared that the freedom of the individual in this country was in some jeopardy—possibly that freedom for which we are engaged in our international struggle. He felt that the position of the local governing authorities as representing the individuals was being weakened and the power was being rapidly centralised in Whitehall. Incidentally this might be in part attributed to the system by which public funds were disbursed as grants. The University would prove a great bulwark of defence and the strongest pillar would

be Senate. To achieve a seat on Senate should therefore be the ideal of every University teacher.

Conversely Senate should welcome representation of every division of knowledge worthy of representation. Without this such division would suffer in the place that really mattered and it would be against the University interests. Admission should not depend so much upon finance or the person as upon the subject concerned. This view he had developed as a result of his own experience.

Professor Share Jones concluded by paying a warm tribute to the University as an institution. He was grateful to Providence that his feet had been set in the direction of Liverpool. His indebtedness to the associations he had formed there was great and his gratitude for the many benefits he had received would endure unto the end. (Applause.)

He thanked the Vice-Chancellor for his extremely kind and generous speech as also his two colleagues who had spoken and all his colleagues for the kind manner in which the observations had been received. He thanked them also for their splendid gift and above all for the magnificent tribute which they had been good enough to inscribe in the album. His interest in the University would remain.

His wife would wish to be associated with this expression of gratitude and thanks. She regretted her absence, which was unavoidable, but like his own, her interest in the University with which she was so intimately connected would remain. She had never spared herself in endeavouring to advance the cause of veterinary education and he (Professor Share Jones) could endorse all that had been so graciously said.

ANIMAL TRANSPORT ON THE WESTERN FRONT

In connection with the arrival of Indian units in France with large numbers of pack and draught mules, the *Times* Special Correspondent on the Western Front observes: "There still exists a lurking doubt, particularly among the cavalry officers, as to the efficacy in all circumstances of 100 per cent. motorisation. For long distances on good roads and in good weather the advantages of mechanical transport are not disputed. An army which went to war without its lorries and tractors would have lost the battle in advance. But for operations across country in all weather conditions it is not so clear where the truth lies. The advocates of animal transport lay emphasis on the elasticity of the horse and mule, which travel light in comparison with mechanical vehicles, which, for the most part, are tied to the road, and which depend on a long and heavy train of fuel, oil, and repair services.

"There is a great deal to be said on both sides of the question. We have seen all kinds of weather here in France, warm and wet, cold and dry. We have seen lorries stick in the mud and other lorries slip off icebound roads to disaster in a ditch. On the other hand we have also seen tractors, of which many patterns exist, charging with heavy guns across ploughed fields inches deep in mud.

"The problem still exists. Without a doubt there is still room for animal transport in a modern army, and the aim of army administration is to find the most effective balance between the tractor and a draught animal. Now that animals have made their appearance in France it will be possible to continue peace-time experiments in conditions more closely resembling active service."

We note with interest, too, that the New York Correspondent of the *Daily Mail*, in quoting from a list of war orders made by the British-French purchasing comcissions there, includes "a vast number of horses and mules."

ROYAL COLLEGE OF VETERINARY SURGEONS

Membership Examinations, December, 1939

LIST OF SUCCESSFUL CANDIDATES

(*Continued from page* 1496 (Vol. 51))

Glasgow

FOURTH YEAR:

Cairns, J. T.	Melville, A. V.
Clark, J. S.	Monie, R. F.
Dayus, E. H.	Moore, C. C. S. S. A.
Dunlop, Francis	Morrison, A. M.
Ferguson, Miss J. R.	Pettigrew, C. M.
Findlay, J. W. M.	Rose, W. K.
Gray, P. M.	Scott, Alex.
Hay, T.	Scott, W. A. C.
Hempstead, F. J. D.	Straiton, E. C.
Macleod, D.	Thompson, J. J.
McMillan, M. M.	Wood, D. W. (Edinburgh)

Liverpool

SECOND YEAR:

Edwards, A. M. (H)	Ohri, H. D.
Garratt, D. M. G. (H)	Rimmer, B.
*Griffiths, R. B.	Roberts, H. R.
Hunman, Robt.	Simpson, C. A. C.
Jenkins, J. B.	Thomas, E. V.
McCreanor, Miss M.	

* denotes Second Class Honours.
(H) denotes credit in Histology.

THIRD YEAR:

Barber-Lomax, J. W. (P)(A)	Helme, John
Bee, B. R.	Henderson, W. (A)
Ferguson, H. H.	Mahmoud, A. H.
Greenway, E. D.	Slinger, W. B.
*Hall-Patch, P. K. J. (Edin.)	

* denotes Second Class Honours.
(P) denotes credit in Pharmacology.
(A) denotes credit in Anatomy.

FOURTH YEAR:

Davies, H. S.	Jones, Ivor
Donnelly, J. F.	Limont, A. G.
Edwards, C. M.	Mitchell, P. J.
Greer, F. G.	Turnbull, Peter
Hall, J. D.	

FINAL YEAR:

Carr, W. H.	Ormrod, A. N.
Hornby, R. B.	Smallwood, Miss E.

Dublin

FIRST YEAR:

Ahluwalia, C. S.	McGrenra, D. P. (B)
Aitken, John	McNally, G. K.
Cranley, John	*McNelis, N. J.
Eivers, B.	O'Brien, W. B.
English, P. J.	O'Callaghan, F. J.
Feeney, G. H.	O'Connor, J. G.
Harris, D. P.	Paul, C. B. (C)
Kavanagh, J. F.	Power, P. N.
Kelly, B. O.	Quealy, A.
Kelly, Roderick	Rice, D. P.
Leonard, T. B.	Russell, F. W.
McCann, P. G.	Slevin, J. G.

* denotes Second Class Honours.
(C) denotes credit in Chemistry.
(B) denotes credit in Biology.

SECOND YEAR:

Carroll, G. A.	McGowan, T. E.
Counihan, E. J.	Magee, B. L.
*Coyle, M. J.	Marshall, D. R.
Dolan, M. M.	Mullarkey, J. P.
Fay, T. G.	*Parker, I. V. G.
Geaney, D. (H)	Pollock, A.
Hobson, J.	Scannell, Peter
Johnson, J.	Shinnors, G. A. (H)
*Jones, A. R.	Smyth, A.
Larkin, P.	

* denotes Second Class Honours.
(H) denotes credit in Histology.

THIRD YEAR:

Burns, T. F.	Lynch, T. A. (P) (H)
Clarke, J. B.	McClay, Miss M. S.
Dempsey, N. P.	McCrea, C. T.
Dodd, A. M.	McLaughlin, J. F.
Donnelly, A. D.	McVeigh, D.
Farrelly, C.	Mahony, I. J.
Fitzsimons, T. G.	Meegan, P. A.
Forgie, S. A.	O'Kennedy, J. K.
Good, N. S.	O'Reilly, H. L.
Hunter, W. M. D.	Power, W. P.
Kerr, K. R. (P)	Ray, N.
Kinsella, L. K.	

(P) denotes credit in Pharmacology.
(H) denotes credit in Hygiene.

FOURTH YEAR:

Bolton, S. R.	Mukerjee, K. C.
Donohue, E. B. (Paras)	O'Dwyer, M. J.
Hewer, J. D. R.	O'Hagan, Patrick
McCormack, H. J.	

(Paras) denotes credit in Parasitology.

FINAL YEAR:

Harnett, W.	McDowell, H. G.
Hyde, D. D.	McKinley, W. G.
Keast, P. H. J.	Nagle, J. J.
Lawther, J. M.	O'Reilly, J. J.
McCarthy, M. F.	Searle, M. E. I.

FOOT-AND-MOUTH DISEASE

The existence of foot-and-mouth disease was confirmed among cattle at East Horndon, Essex, on Sunday night, The area subject to restrictions in the movement of animals lies wholly in the county of Essex.

Cattle worth £3,000 were slaughtered on Monday on a farm at Caldecote, near Baldock, Herts, where an outbreak of foot-and-mouth disease was confirmed over the week-end. Prize Suffolk ewes which were lambing on Sunday were destroyed, together with 28 fat bullocks worth £30 each and 140 pigs. As a result of the order restricting the movement of stock in the counties of Bedford, Cambridge, Essex, Hertford and Huntingdon, Biggleswade cattle market was closed.

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ROYAL COLLEGE OF VETERINARY SURGEONS

The Registrar of the Royal College of Veterinary Surgeons announces that the addresses of the following members are unknown to him. The assistance of members in obtaining the required addresses would be welcomed.

Name	*Address*
Callanan, A. F.	Barnet.
Gale, F.	Romsey, Hants.
Hind, J. H.	Skegness.
Malone, J.	Honiton.
Norrington, C. P.	Glastonbury.
Stokoe, R.	Kimbolton.
Tyler, C.	Boscombe.
Weir, R. E.	Bullsbrook, W. Australia.
Wilkinson, A.	Manchester.

NOTES AND NEWS

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events

Jan. 9th.—Meeting of the Finance and General Purposes Committee, N.V.M.A., at 36, Gordon Square, W.C.1, 2 p.m.

Jan. 10th.—Joint meeting of the Parliamentary and the Veterinary Officers and Public Health Committees, N.V.M.A., 10 a.m.; followed by a meeting of the Organising Committee, N.V.M.A., 11.30 a.m.—at 36, Gordon Square, W.C.1. Meeting of the **Council**, N.V.M.A., at the Connaught Rooms, Great Queen Street, Kingsway, 2.30 p.m.

Jan. 11th.—R.C.V.S. Committee and **Council** Meetings.

Jan. 15th.—Meeting of the Editorial Committee, N.V.M.A., at 36, Gordon Square, W.C.1, 4 p.m.

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ACTIVITIES OF N.A.R.P.A.C.

We are glad to note that, in its issue of December 29th, *The Times* devoted half a column to reviewing the activities of the National A.R.P. for Animals Committee. It is observed with regret that the fact that the National Veterinary Medical Association is a constituent member of the Committee was omitted; also that the wording was such as to suggest that there are only 600 veterinary surgeons practising in Great Britain. Those small errors, however, crept in after the information contained in the article was issued from Headquarters.

. . . . .

It will be of great assistance to Headquarters at 36, Gordon Square, if prompt return is made of the forms recently issued to Veterinary Officers working for N.A.R.P.A.C. asking them to state what their requirements are in connection with the first-aid boxes (large and small animals) and dog-graspers; also for information concerning the number (approximate) of workers helping in the technical side of the organisation.

Unfortunately the issue of this equipment and the attempt of Headquarters to complete arrangements with the Home Office for the indemnification of skilled workers is being held up as a result of the tardiness in replying.

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SUPPLEMENTARY SUPPLIES OF PETROLEUM FOR VETERINARY SURGEONS

With reference to the note, headed as above, which appeared in our issue of December 23rd, we are asked by Mr. J. Holroyd, F.R.C.V.S., D.V.S.M. (Vict.), Liaison Officer for the North-Western Division, to state that all applications received by him have already been dealt with and that unless there are very exceptional circumstances, the Divisional Petroleum Officer will not allow any further supplementary ration during the month of January.

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R.C.V.S. OBITUARY

CONNOCHIE, Thomas Dixon, Braeside, Galashiels, Selkirk. Graduated N. Edinburgh April 12th, 1882. Died December 19th, 1939; aged 78 years.

LITTLE, William Lancelot, F.R.C.V.S., Capt., late R.A.V.C., 16, Queen's Road, Reading. Graduated London, December 17th, 1902. Fellow May 17th, 1913. Died December 28th, 1939.

Mr. Thomas D. Connochie, M.R.C.V.S.

Mr. Thomas D. Connochie, M.R.C.V.S., Galashiels, whose death, which we record with much regret, took place in an Edinburgh nursing home, was a notable

personality in the Borders and a figure well known in farming circles. Mr. Connochie, who was born in Selkirk in 1862, after graduating set up in practice in his native town, but four years later removed to Galashiels, where he had resided ever since and from which town he conducted a wide practice, which took him to remote corners of the Border country.

The Scotsman says of him, "His manner won him a host of friends in farming circles, and he was recognised as a most efficient and capable veterinary surgeon. He belonged to a family which has had a remarkable record in veterinary science, and at one time in his career Mr. Connochie could count ten relations who followed the same profession, these including grandfather, father, uncles, brothers, nephews, and a son. Mr. Connochie served the farming community in Selkirkshire for 58 years, and two years ago was presented with a testimonial by the friends and members of the Selkirk and Galashiels Agricultural Society. He was a fine judge of horses, and as such his services were keenly sought by agricultural societies in various parts of the country."

Mr. Connochie had the distinction of being the oldest burgh official of the Corporation of Galashiels, having been appointed veterinary surgeon to the Council in the closing years of last century.

The *Border Telegraph*, in the course of an extended appreciation, observes: "His rich fund of humour made him welcome everywhere he went, be it to a farmyard, a company met in a social capacity, or even on the street. In this connection reference might be made to his long association with the Clovenfords Burns Club, and the fact that he frequently presided at the annual celebrations. On these occasions he was at his very best with his never-ending fund of stories and apt quotations from the works of Burns, of which he had a wide and intimate knowledge.

"Mr. Connochie was greatly interested in Freemasonry, being a prominent member of Galashiels Lodge, No. 262, of which he was Treasurer for the long period of 41 years.

"For 58 years Mr. Connochie served the farming community in Selkirkshire, and in recognition of his services he was honoured by members and friends of the Selkirk and Galashiels Agricultural Society at the annual dinner held in the Douglas Hotel, Galashiels, in February, 1938. The presentation, which consisted of a well-filled wallet and also a beautiful Westminster chimes clock for Mrs. Connochie, was made by Provost Roberts, Selkirk, who said Mr. Connochie "had gone about them as a man with a song in his heart—a rather rare and lovable man. . . . If the supreme object in life was to win the admiration and goodwill of his fellowmen, then Tom Connochie had well succeeded. He came like a breath of fresh air from the hills.

"In his early days, Mr. Connochie was a good horseman and rode and won many prizes at Selkirk Common Riding. He was also an excellent judge of horses, and as such his services were frequently in demand by agricultural societies in the Borders and in various parts of the country. In this respect his services were greatly valued by the Town Council of Galashiels, who had absolute faith in his buying and disposing of animals.

"Mr. Connochie had not a great deal of time for recreation, but he thoroughly enjoyed bowling and curling, and took a keen interest in Rugby football and cricket, and as one who never lost his youthful spirit and wide outlook on things in general, he ever sought to encourage the youth of the town in clean and healthy sport. Though he never lost his love for his native town and the Common Riding, Mr. Connochie entered wholehearted into the annual celebrations in connection with the Braw Lads' Gathering, of which he was a patron. In a word, the welfare of the town was very near to his heart, and we will all miss him going out and in amongst us.

"Mr. Connochie's wife was Miss Agnes M. Hope, daughter of the late Mr. Robert Hope, Selkirk, and in August of last year they celebrated their golden wedding. Her death in June was a great blow to him, from which he never fully recovered. He is survived by a son and a daughter, another son having made the supreme sacrifice in the last war."

Capt. W. L. Little, F.R.C.V.S.

The New Year will be saddened for many of our readers in the South, where he was widely known and held in much affection and esteem, by the intimation, which we make with deep regret, that Captain William Lancelot Little, F.R.C.V.S., of Reading, was killed—his injuries proving instantaneously fatal—in a motor accident near Chipping Norton, Oxfordshire, on Thursday of last week.

Captain Little was driving home from a Christmas holiday in North Wales and, so we are informed, when he was meeting a convoy of army vehicles, his car struck the grass verge and skidded across the road into the second vehicle. No doubt the snowy conditions and the black-out contributed to the accident.

Captain Little was a practitioner of progressive mind and outlook, unassuming to a degree despite his wide experience and high standard of attainment in his calling. Amongst his colleagues his judgment was recognised as extremely sound, while his clients in his extensive practice also held him in high regard for his sincerity, conscientiousness and rigid attention to detail. Captain Little had, too, more than the common share of practitioners' interest in the progress of veterinary research. He rendered valuable assistance in the work which led to the adoption of calcium therapy in the treatment of milk fever in the cow, working in conjunction with the National Institute of Research in Dairying at Shinfield. Interesting himself wholeheartedly, too, in dietetics, he made a special study of that branch of veterinary science. Both features of this aspect of his work are usefully reflected in numerous carefully prepared and informative contributions to the periodicals of the profession.

After graduation, Captain Little was for some years a keen and valued assistant to Mr. William Shipley, of Great Yarmouth, securing his Fellowship in 1913, when "Pyrrhoea in Horses" was the subject of his thesis. In 1914 he was appointed to the Remount Board and was sent to Canada and the U.S.A., buying horses. Joining the Royal Army Veterinary Corps, he saw service in Egypt and in Italy, and later he was stationed in Dublin.

About 20 years ago he joined partnership with Mr. T. Stainton, at Reading, where, throughout the remainder of his life, his quiet efficiency in their practice and as consultant was widely recognised.

Captain Little rendered yeoman service to the Royal Counties Division of the N.V.M.A., who never had a more staunch member or one who was more consistent in his help and attendance.

"We shall miss him in the Royal Counties," writes Mr. H. Bell, the Hon. Secretary, "because he was a very active member and the fact that he lived in Reading, which is virtually our headquarters, enabled him to attend most of our meetings. As well has having occupied the Presidential Chair he had contributed more than one paper which marked him as a practitioner with an intellect well above the average." It is sad to know that Captain Little has not lived to enjoy his second term of office as President, to which the members of the "Royal Counties" had just elected him in recognition of his sterling worth.

Mr. Bell adds the following interesting note on one of Captain Little's hobbies—angling (both sea and fresh water), the collection of tropical fish, and of stamps—which he pursued with the devotion of one who was fascinated with these interests. "He and I were very good friends and one one occasion in Reading he invited me to come home with him and see his fish. I went home with him but I must confess that I was not very thrilled at the prospect of inspecting what I supposed would be a few goldfish. To my astonishment he led me into a room where there were several electrically heated aquaria filled with some of the most amazing creatures I had ever seen

in the fish line. He had many varieties and I gathered from his talk that what he did not know about the life histories and native haunts of these animals was not worth knowing." A keen horseman in his younger days, Captain Little brought that enthusiasm with him to Reading, where he entered, with his customary keenness, into many aspects of the life of the town: he was a member of Reading Rotary Club and was connected with the Berkshire Wanderers Rugby Football Club.

* * * * *

CONTROL OF LIVESTOCK AND HOME-PRODUCED MEAT

It was announced on December 28th that the Government had decided to extend the rationing scheme to meat, consumers being asked to register for meat supplies with the retailer of their choice not later than Monday next. The date on which rationing will be introduced is to be announced later, the Minister of Food stating that it will not be before the end of January, but that the scheme of control of livestock and home-produced meat, which is an essential preliminary to the rationing of meat, will be brought into operation on January 15th. From that date the Ministry will buy not only all imported meat but all livestock offered by farmers for slaughter, and will control the distribution of all meat supplies, home-produced and imported.

In this connection, Mr. Morrison said that imports have been satisfactory, but cargoes inevitably vary from time to time. In distribution priority must be given to the needs of the Services, and it is necessary to have a reserve against irregularities in future arrivals. As the ration will be based on value, its weight will vary with the consumer's choice of quality. It is hoped to maintain the difference in prices for home-produced and imported meat. In fixing prices, which will be higher than when control was removed recently, account will be taken of high-quality production. The quantity of pork available is likely to be below normal, because more pig meat is being converted into bacon.

"Edible offals" will not be rationed. A proportion of meat supplies will be available for manufacturing purposes, and, subject to a limitation on content, the manufactured products will not be rationed. They include sausages, brawn, meat pies, galantines, and meat pastes.

The Minister said that the scheme has been prepared in consultation with all sections of the trade, and would be operated by traders. The Ministry's aim is to conduct the business of supplying the people with food on a no-profit basis. Meat imports are managed on behalf of the Ministry by a national association of importers. At home farmers will market their stock at collecting centres, most of which are the usual livestock markets, and all will be able to send their stock to markets near their farms. The stock will be transported to selected slaughterhouses, and the meat will be distributed in bulk by associations of wholesalers, and will be allocated among retail shops by committees set up, district by district, by the butchers themselves.

To secure effective supervision of slaughtering and to ensure the most profitable use of by-products only 750 slaughterhouses, chosen for their convenience and equipment, will be used, but tribunals are being set up to hear further applications for inclusion.

* * * * *

Under Part V of the Livestock Industry Act it was contemplated that there should be three experimental slaughter-house schemes under the supervision of the Live Stock Commission—one in Scotland and two in England and Wales. It was provisionally arranged that the Scottish scheme should be in Edinburgh.

At a meeting of the General Purposes Committee of Edinburgh Town Council, a letter was read from the Live Stock Commission stating that the schemes had been abandoned and that an Order on the subject would be made by the Minister of Agriculture at an early date.

CORRESPONDENCE

Letters to the Editor should reach the Office not later than by the first post on Tuesday morning for insertion in following Saturday's issue.

The views expressed in letters addressed to the Editor represent the personal view of the writer only and must not be taken as expressing the opinion or having received the approval of the N.V.M.A.

* * * * *

SUNG, THE GIANT PANDA

To the Editor of the Veterinary Record

Sir,—While listening-in to the B.B.C. a few weeks ago, I heard an announcement that the Giant Panda was suffering from a disease which the experts of the Royal College of Surgeons were unable to diagnose. At the moment I thought the announcer had inadvertently ommitted the word "veterinary." Apparently such was not the case, judging from a report in the *Daily Telegraph* of December 30th, 1939, which reads as follows:—

Why Panda was Vegetarian. Problem for Surgeons

Sung, the Giant Panda, which in life delighted Zoo visitors, will in death provide the Royal College of Surgeons with one of its most interesting anatomical subjects. Never before has a complete specimen been available at the college for dissection.

Dr. A. J. E. Cave, assistant conservator of the college museum, is making the examination which will take months. He may discover the cause of Sung's mysterious death.

Dr. Cave said yesterday that the investigation was particularly interesting because the panda was ancestrally carnivorous and is now vegetarian, its diet consisting solely of bamboo shoots. "The panda has the five digits," he added, "but has undergone a modification of the forefoot. A pseudo thumb, a little bone, has developed on the thumb side of the wrist. Against this bone the panda holds the bamboo stalks while it eats."

Inasmuch as the panda is an animal and not a human being, it would be interesting to know whether a veterinary surgeon had an opportunity of diagnosing the disease of Sung the panda; furthermore, why the *post-mortem* examination is being carried out at the Royal College of Surgeons and not at the Royal Veterinary College. The writer may have more interest than the majority of our members in the case, having been veterinary surgeon for a great number of years in charge of the animal health section at the Zoological Gardens in a Republic in South America, where it was never deemed advisable to consult the medical profession *re* the illness of animals. It would be interesting to know how often members of the veterinary profession are summoned to diagnose and also make *post-mortem* examinations on human subjects.

The Vice-Chancellor of the Liverpool University appropriately mentioned the other day that the barber's pole still reminded us that it was not so very long ago the surgeon was able to cut himself adrift from the barber and become a member of a learned profession. I should like to add that it is our duty to realise as well as make others outside our profession realise that we have also, like our sister profession, cut ourselves adrift, in our case from the horseshoe handicraft at a forge, and are members of a learned profession. Furthermore, that we do not wish to attempt diagnosing human diseases or carry out *post-mortem* examinations should they fail to diagnose and cure such cases.

Yours faithfully,

Edward Morgan.

"De Lejos,"
23, Crest Road,
Hayes, Kent.

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